

DRAFT

US LHC Accelerator Research Program
FY2005 Task Sheet

Task Name: Beam Commissioning

Date: 29 June 2004

Responsible Person(s) (overall lead, lead at other labs): E. Harms, A. Drees, M. Furman

Budget (specified for each lab): \$80K

FY05 Milestones

- 1) Sep 04. TI-8 tests begin
- 2) Jan 05. LHCOP group commissioning plan presented at Chamomix '05
- 3) Jan 05. Start defining LARP jobs and names, as participants in CERN planning exercise

Statement of work for FY05 (include description of year's "deliverable" and, if appropriate one or a few intermediate milestones):

Work for this year will be two-fold:

- begin a U.S presence during LHC-related commissioning activities, specifically for TI-8 line commissioning and collimation tests in early FY2005
- continuing discussions with CERN and LARP collaborators on the involvement of U.S. Accelerator Scientists in the beam commissioning of the LHC.

The expected outcome of these discussions is a determination of specific tasks that can be carried out by the US contingent and the identification of tasks, candidate visitors and a schedule of their presence for LHC commissioning. Areas of interest by the U.S. include beam physics, collimation, and electron cloud issues.

FY05 \$80k (0.4 FTE (FNAL))

Statement of expected follow-on work in subsequent years (include "ultimate" goal and time scale for this sub-program, as well as plans for specific work and rough budget need for next 2 years):

The aim of this effort is to provide a US presence in beam commissioning of the LHC that provides mutual benefit to both LHC operation and to the US effort in accelerator physics. This work will proceed at an increasing level until peaking during LHC commissioning which is expected to begin in 2007. During commissioning, the stated goal is to have one U.S. physicist present on every LHC commissioning shift.

FY06 \$200k (0.6 FTE (FNAL), 0.4 FTE (BNL))